

tagged white blood cell scan six months later did not show any evidence of osteomyelitis.

Conclusion: *C. parapsilosis* is a normal commensal of the human skin, and is notorious for infecting hyperalimentation solutions and catheters by forming biofilms. Immunocompromised patients and those undergoing gastrointestinal procedures are at highest risk. In our patient, the main risk factor was habitual biting of his thumb that led to invasive fungal disease. Among patients not responding to conventional antibiotic therapy, early surgical debridement for identification of an alternate etiological agent is crucial. *C. parapsilosis* is sensitive to azoles and amphotericin B. The duration of therapy for osteomyelitis is usually at least six months.

<http://dx.doi.org/10.1016/j.ijid.2014.03.1024>

Type: Poster Presentation

Final Abstract Number: 54.024

Session: Mycology, Fungal Infections and Antifungal Drugs

Date: Friday, April 4, 2014

Time: 12:45–14:15

Room: Ballroom

Clinicoepidemiological profile of pulmonary mycosis in Coastal Karnataka, India

B. Achappa*, V. Acharya, D. Madi

Kasturba medical college, Mangalore, Manipal University, Mangalore, India



Background: Pulmonary mycosis is a budding problem worldwide. In a developing country, it remains more so a challenge because of increased fungal invasion in diseased lung secondary to tuberculosis or other immunocompromised state, lack of diagnostic facilities and financial constraints which pose a challenge in proper diagnosis, follow up and treatment.

Methods & Materials: This is a prospective study of patients with pulmonary mycosis in a tertiary care centre. 56 patients with proven fungal culture were included. Data was collected using a proforma which included the demographic data, clinical features, bronchoscopic findings and fungal culture report. The data were entered in MS Excel. Descriptive statistics, i.e., means, standard deviations, frequencies, and percentages, were used to describe the study variables

Results: Mean age group of our patient was 52.36 ± 14.55 years. Pulmonary mycosis occurred in the setting of pre-existing lung disease in 64.28% of patients. Mycosis in naïve lung and with no immunocompromised condition was seen in 17.86% while 73.21% patients had an underlying lung disease or an immunocompromised status. Of the total patients, 23.21% were diabetics, 5.35% were having hematological malignancies, 10.71% were having autoimmune connective tissue disorders on steroids and 1.78% with retroviral disease. Our data shows fungal culture isolates with prevalence of *Candida albicans* (69.6%), *Candida krusei* (12.5%), *Candida glabrata* (10.7%), *Candida tropicalis* (5%) and *Aspergillus fumigatus* (5%).

Conclusion: Pulmonary mycosis is a challenging problem in developing countries. Though, it is found most commonly in patients with underlying structural lung disease and immune-compromised hosts, a high index of clinical suspicion should be kept even in people with no obvious risk factors as primary pulmonary mycosis incidence in naïve lung is on rise. Our study emphasizes the role of early bronchoscopy and lavage cultures

for early diagnosis and more specific treatment for pulmonary mycosis.

<http://dx.doi.org/10.1016/j.ijid.2014.03.1025>

Type: Poster Presentation

Final Abstract Number: 54.025

Session: Mycology, Fungal Infections and Antifungal Drugs

Date: Friday, April 4, 2014

Time: 12:45–14:15

Room: Ballroom

Candida blood stream infections: species distribution and antifungal resistance patterns



A. Papanagiotou¹, S. Vlachos¹, E. Prifti¹, A. Charalabopoulou¹, A. Pepa¹, P. Tsiachris¹, F. Glinavos¹, G. Adamis^{2,*}, E. Kostis¹, K. Tzanetou¹

¹ "Alexandra" General Hospital of Athens, Athens, Greece

² "G. Genimatas" General Hospital of Athens, Athens, Greece

Background: To study the antifungal resistance profiles and species distribution of *Candida* blood stream infection (BSI) isolates in a tertiary-care hospital

Methods & Materials: During a 20-month period (January 2012 to August 2013) 31 immunocompromised or long-term hospitalized patients were detected with candidemia by blood culture. The blood samples were inoculated in BacTec bottles and incubated in the automated BACTEC 9240 system. Identification of the *Candida* clinical isolates to the species level was performed by API ID 32 C (chromogenic SDA was used for preliminary identification). Susceptibility testing to antifungal agents was performed by Etest strips on RPMI agar according to the recently revised by CLSI species-specific interpretive breakpoints (M27-S4).

Results: Out of 31 *Candida* BSI isolates 51.61%, 12.90%, 12.90%, 9.68%, 3.23%, and 9.68% were *C. parapsilosis*, *C. albicans*, *C. glabrata*, *C. tropicalis*, *C. guilliermondii*, and other (*C. sake*, *C. rugosa*, *C. norvegensis*) respectively. The non-*Candida albicans* (NCA) species were identified in 27 (87.10%) of all the candidemia cases. *C. albicans* isolates were susceptible to all antifungal agents tested, except for itraconazole (50% of isolates showed intermediate resistance). One *C. tropicalis* isolate was resistant to amphotericin B (AP). *C. parapsilosis* isolates showed 6.25%, 38.46%, 56.25%, 12.5%, and 13.33% resistance to AP, fluconazole (FL), itraconazole (IT), caspofungin (CS) and anidulafungin (AND), respectively. All *C. parapsilosis* isolates were susceptible to micafungin (MYC). The resistance rate of *C. glabrata* isolates was 25%, 75.0%, 25.0% and 25.0% to FL, IT, AND and MYC respectively. One *C. guilliermondii* isolate was resistant to IT, CS and AND. The overall resistance rate of NCA to AP, FL, IT, voriconazole (VO), CS, AND and MYC was 7.41%, 34.78%, 55.56%, 3.7%, 11.11%, 15.38%, and 3.70% respectively.

Conclusion: (a) The non-*Candida albicans* are the most prevalent species causing BSI. *C. parapsilosis* is the most common followed by *C. glabrata*, *C. albicans* and *C. tropicalis*. (b) In contrast to *C. albicans* the NCA species indicate various resistance rates to antifungal agents. The highest resistant rate was detected to itraconazole, whereas the lowest to voriconazole and micafungin. (c) Identification to species level and susceptibility testing should be performed for all NCA isolates

<http://dx.doi.org/10.1016/j.ijid.2014.03.1026>